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**CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on July 21, 2004.

 Christine Crawford - Secretary to Craig A. Ash

L305 0003  
GNM/RAJ/raj

Paper No.: \_\_\_\_\_

**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

Inventor(s): WALTER, Bruno

Title: ACOUSTIC FLOW PULSING APPARATUS AND METHOD FOR  
DRILL STRING

Serial No.: 10/614258

Filed: 8 July 2003

Examiner: TSAY, Frank

Art Unit: 3672

Date: 21 July 2004

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**AMENDMENT****Introductory Comments**

Responsive to the Office action mailed 28 April 2004, please amend this application as follows:

- Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.
- Remarks/Arguments begin on page 8 of this paper.

08/04/2004 EKEY11 00000001 021037 10614258

01 FC:2201 43.00 DA  
02 FC:2202 9.00 DA

- 1 -

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 Christine Crawford - Assistant to Craig A. Ash

File No.: L305 0003  
CAA/cc

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith for filing in regard to the patent application of:

Inventor(s): **WALTER, Bruno.**  
Title: **ACOUSTIC FLOW PULSING APPARATUS AND METHOD FOR DRILL STRING**  
Serial No.: 10/614258  
Filed: 8 July 2003  
Examiner: TSAY, Frank  
Date: July 21, 2004

Art Unit: 3672

Enclosed are:

☒ Amendment.

☒ The Commissioner is hereby authorized to charge the indicated fees (\$52.00) or credit overpayment, to Account No. 02-1037

☒ The Commissioner is hereby authorized to charge payment of any fees associated with this communication or credit any overpayment, to Deposit Account No. 02-1037.

CLAIMS AS AMENDED					
For	No. after amendment	No. paid for previously	Present Extra	Rate	Fee
Total Claims (>20)	21	20	1	\$18.00	\$ 18.00
Indep. Claims (>3)	4	3	1	\$86.00	\$ 86.00
Multiple Dep. Claims	0	0	0	\$280.00	\$ 0.00
TOTAL FEES					\$ 104.00
Reduction by 50% for filing by small entity (Note 37 CFR 1.27)					\$ 52.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$ 52.00

**PATENT APPLICATION FEE DETERMINATION RECORD**  
Effective January 1, 2003

Application or Docket Number

10614258

**CLAIMS AS FILED - PART I**

	(Column 1)	(Column 2)
TOTAL CLAIMS	19	
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	19 minus 20= *	
INDEPENDENT CLAIMS	2 minus 3 = *	
MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/>		

\* If the difference in column 1 is less than zero, enter "0" in column 2

**SMALL ENTITY TYPE** ☐ OR

**OTHER THAN SMALL ENTITY**

RATE	FEE
BASIC FEE	375.00
X\$ 9=	
X42=	
+140=	
TOTAL	375

RATE	FEE
BASIC FEE	750.00
X\$18=	
X84=	
+280=	
TOTAL	

**CLAIMS AS AMENDED - PART II**

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	* 21 Minus	** 20	= -1
Independent	* 5 Minus	*** 3	= *
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

**SMALL ENTITY** OR

**OTHER THAN SMALL ENTITY**

RATE	ADDITIONAL FEE
X\$ 9=	9
X42=	432
+140=	
TOTAL ADDIT. FEE	52.00

RATE	ADDITIONAL FEE
X\$18=	
X84=	
+280=	
TOTAL ADDIT. FEE	

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	* Minus	**	=
Independent	* Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

RATE	ADDITIONAL FEE
X\$ 9=	
X42=	
+140=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
X\$18=	
X84=	
+280=	
TOTAL ADDIT. FEE	

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	* Minus	**	=
Independent	* Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

RATE	ADDITIONAL FEE
X\$ 9=	
X42=	
+140=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
X\$18=	
X84=	
+280=	
TOTAL ADDIT. FEE	

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."

\*\*\*If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.